



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

JTW

Appl. No. : 10/777470 Confirmation No.: 2234
Applicant : Lee
Filing Date : 02/11/2004
Title : Microfluidic Devices For Controlled Viscous Shearing And Formation
Of Amphiphilic Vesicles
Group Art Unit : 1641
Examiner : Unknown
Docket No. : 703538.4033
Customer No. : 34313

Commissioner for Patents
PO Box 1450
Mail Stop Patent Application
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 CFR §§ 1.97 and 1.98, the items identified in this Information Disclosure Statement ("IDS") are brought to the attention of the Office. The items are listed on the attached form PTO-1449 and copies are enclosed for the convenience of the Examiner.

The items identified in this IDS may or may not be "material" pursuant to 37 CFR § 1.56. The submission thereof by Applicant is not to be construed as an admission that any such patent, publication or other information referred to therein is material or considered to be material (37 CFR § 1.97(h)), or even qualifies as "prior art" under 35 USC § 102 with respect to this invention unless specifically designated by Applicant as such.

CERTIFICATE OF MAILING (37 CFR §1.8)

I hereby certify, pursuant to 37 CFR §1.8, that I have reasonable basis to expect that that this paper or fee (along with any referred to as being attached or enclosed) would be mailed or transmitted on or before the date indicated with the United States Postal Service with sufficient postage as first class mail on the date shown below in an envelope addressed to Mail Stop Patent Application, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

Dated: September 8, 2004


Mary L. Smith

Applicant : Lee
Appl. No. : 10/777470
Examiner : Unknown
Docket No. : 703538.4033

INFORMATION DISCLOSURE STATEMENT FILING PROVISION:

☒ This IDS is believed to be timely in that it is being submitted under 37 CFR § 1.97(b), that is (1) within three months of the filing date of the application, which is not a continued prosecution application filed under § 1.53(d); or (2) within three months of entry of the national stage as set forth in 37 CFR § 1.491; or (3) before the mailing of a first Office action on the merits; or (4) before the mailing of a first Office action after filing a request for continued examination under § 1.114. Thus, no fee is required.

☐ However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and charge the fee due under 37 CFR § 1.17(p) to the deposit account referenced below.

☒ However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and a statement under 37 CFR § 1.97(e) is included below, thus no fee is required.

☐ This IDS is being submitted under 37 CFR § 1.97(c), that is after mailing of a first Office action on the merits, but before a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311.

☐ The fee due under 37 CFR § 1.17(p) is submitted herewith.

☐ A statement under 37 CFR § 1.97(e) is included below, thus no fee is required. In the event that this IDS is not received before a Final Action or a Notice of Allowance, then Applicant respectfully requests that the Office consider the filing of these papers to be submitted under 37 CFR § 1.97(d) and charge the fee due under 37 CFR § 1.17(p) to the deposit account below.

☐ This IDS is being submitted under 37 CFR § 1.97(d), that is after a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311, but before payment of the issue fee. A statement under 37 CFR § 1.97(e) is included below. The fee due under 37 CFR § 1.17(p) is submitted herewith.

Applicant : Lee
Appl. No. : 10/777470
Examiner : Unknown
Docket No. : 703538.4033

STATEMENT UNDER 37 CFR § 1.97(e):

- ☐ Each item contained in this IDS was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS.
- ☐ No item contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this statement after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 CFR § 1.56(c) more than three months prior to the filing of this IDS.

PAYMENT AND/OR AUTHORIZATION TO CHARGE FEES:

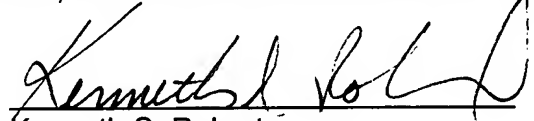
- ☐ A check in the amount of _____ is enclosed for the above fee(s).
- ☐ Please charge _____ to Deposit Account No. **15-0665** for the above fee(s).
- ☒ The Commissioner is authorized to charge any fees required by the filing of these papers, and to credit any overpayment to Orrick, Herrington & Sutcliffe's Deposit Account No. **15-0665**.

Respectfully submitted,

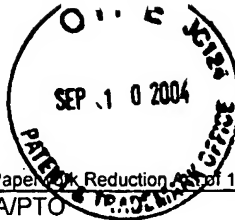
ORRICK, HERRINGTON & SUTCLIFFE LLP

Dated: September 2, 2004

By:


Kenneth S. Roberts
Reg. No. 38283

ORRICK, HERRINGTON & SUTCLIFFE LLP
4 Park Plaza, Suite 1600
Irvine, CA 92614
949/567-6700 Telephone
949/567-6710 Facsimile



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

Complete if Known

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet	1	of	2	Application Number	10/777470
				Filing Date	02/11/2004
				First Named Inventor	Lee
				Art Unit	1641
				Examiner Name	Unknown
				Attorney Docket Number	703538.4033

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number-Kind Code ² (if known)		
	AA	US 2002/0058332 A1	5/16/02	Quake et al.
	AB			
	AC			
	AD			
	AE			
	AF			
	AG			
	AH			

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T ⁶
		Country ³ Number ⁴ Kind Code ⁵ (if known)			
	AA	DE 198 14 267 A1	04/01/1999	GE Bayer Silicones GmbH & Co.	N
	AB	WO 02/068104 A1	09/06/2002	Japan Science and Technology Corporation	N
	AC	WO 2004/002627 A2	01/08/204	President and Fellows of Harvard College	
	AD	EP 1 358 931 A2	11/05/2003	Tosoh Corporation	
	AE	EP 1 362 634 A1	11/19/2003	Japan Sciences and Technology Corporation	

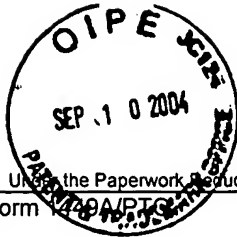
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials ⁷	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	BA	HAVERKAMP et al., "The Potential of Micromixers for Contracting of Disperse Liquid Phases" Fresenius Journal of Analytical Chemistry, Springer, Berlin Germany, Vol. 364, 1999, pages 617-624	
	BB	NISISAKO et al., "Formation of droplets using branch channels in a microfluidic circuit" SICE Osaka, Japan, 2002, pages 1262-1264	

Examiner Signature	DOCSOC1:154041.1	Date Considered	
-----------------------	------------------	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicants unique citation designation number (optional). ²See Kinds of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 USC 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1749A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Complete if Known

Sheet	2	of	2	Application Number	10/777470
				Filing Date	02/11/2004
				First Named Inventor	Lee
				Art Unit	1641
				Examiner Name	Unknown
				Attorney Docket Number	703538.4033

BC	BERTSCH et al., "3D Micromixers – downscaling large scale industrial static mixers" Proceedings of the IEEE 14th annual international conference on microelectro mechanical systems, MEMS 2001, Interlaken, Switzerland January 21 – 25, 2001, pages 507-510
BD	THORSEN, et al., "Dynamic Pattern Formation in a Vesicle-Generating Microfluidic Device", The American Physical Society (4/30/2001), Volume 86, No. 18, pp. 4163-4166
BE	TAN et al., "Microfluidic Liposome Generation from Monodisperse Droplet Emulsion—Towards the Realization of Artificial Cells, 2003 Summer Bioengineering Conference, June 25-29, Key Biscayne, Florida, two pages

Examiner Signature	DOCSOC1:154041.1	Date Considered	
-----------------------	------------------	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicants unique citation designation number (optional). ²See Kinds of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 USC 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450